



Fully Integrated High Power Laser Diode Control and Mounting Module



CCM-STD / Control and Mount Module

- o Current Source + TEC Controller + Integrated Laser Mount/Heat Sink
- o Includes TEC Based Cooling for Laser Diodes up to 150 Watts of Laser Output Power
- o Includes Mounting Plate and Heat Sink for Laser Diodes
- o Optimized for Fiber Coupled Multi-Emitter Pumps from AeroDIODE, II-VI, IPG, NLight, Lumentum, BWT, Coherent and LUMICS
- o USB Interface, Includes Programming Tools, Software Suite, DLL Library, and GUI



A COMPLETE SOLUTION FOR MOUNTING AND CONTROL OF HIGH POWER LASER DIODE PUMPS

This High Power Laser Diode Driver is compatible with multimode fiber coupled multi-emitter pump lasers from II-VI, nLight, Lumentum, IPG, Dilas, BWT, Lumics and more. It is a high stability complete solution with a 13 Amp laser bias current range and 23V compliance voltage range. It includes the laser driver, the TEC controller and an air-cooled heat sink base. The integrated TEC elements under the mounting plate keep the temperature stable and remove the heat. The TEC power is optimized for high power pump laser diode driving.

CCM can be configured to control 2 x high power multimode pumps in series



This control and mounting module is used primarily for CW mode. But it is also able to deliver pulses which are generated internally by an on-board pulse generator, or on-demand from an external analog modulation signal. This control and mounting module is very compact and offers an excellent pre-configured solution for OEM integration into your high power laser system.

GRAPHICAL USER INTERFACE INCLUDED

Configuration and operation of the controller is streamlined and simplified by providing control over the critical operating parameters of the controller: peak pulse current, pulse width, frequency, triggering, and other driver parameters are available.

The GUI also provides control over laser diode temperature, and includes operational safety limits to help protect the laser diode from damage.

In addition to providing real-time control over the laser diode, the GUI displays real-time operating status of the controller and laser diode operating parameters.

Simple User Control of all Laser Diode Parameters through USB Interface and GUI Software





CCM-STD / Control and Mount Module Performance Specifications

LASER DIODE DRIVER - CURRENT SOURCE

- Current Range: 0 - 13 Amps
- Compliance Voltage Range: 0 - 23 Volts
- Current Stability: +/- 0.025% of Full Scale Set-Point Current
- Laser Diode Set-Point Adjustment Resolution: 50 mA
- Control Modes: ACC (constant current) and APC (laser output power feedback from photodiode)

TEC CONTROLLER

- Temperature Control Range: 15 - 40 °C
- Temperature Stability (typ): < 0.05 °C
- TEC Output Power (max): 150 Watts

MODULATION BANDWIDTH

- Bandwidth: 100 kHz
- Trigger: Internal or External

USER INTERFACE AND POWER INPUT

- USB with GUI Software
- UART
- Includes Control Software Libraries : DLLs, Hexa, Labview VI (prov)
- Power Supply (included) : 24 VDC (input 110/230 VAC, 50/60 Hz)

DIMENSIONS

- 238mm * 146mm * 142.5mm



Offered by
LASER LAB SOURCE



LASER
DIODE
CONTROLLERS



PRODUCT SALES AND SERVICE:

Unlimited phone and email support is provided for products purchased through Laser Lab Source. Orders for this product are fulfilled by Laser Lab Source in North America and select international regions. It is manufactured by AeroDIODE, Talence, France.

PRODUCT WARRANTY:

This product is sold with a full one-year warranty. It is warranted to be free from defects in material and/or workmanship for a period of one year from the date of shipment. The warranty does not cover damage to the product due to mishandling or use of the product outside of its specified maximum ratings.



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